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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,409	05/15/2006	Jozef Pieter Van Gassel	NL 031340	7907
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EXAMINER SUAREZ, FELIX E				
ART UNIT 2857		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,409

Applicant(s)

VAN GASSEL, JOZEF PIETER

Examiner

Felix E. Suarez

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Objection to the Specification

1. The disclosure is objected to because of the following informalities: applicant is required to add section headings; the Specification without section headings has no clear distinction between the background and the disclosure of the invention.

Correction is required. Guidelines are provided below.

Guidelines

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are strongly suggested by the Examiner for the applicant's use; this is suggested to facilitate the issue by publication but not for examination.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 12, is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are drawn to a computer program per se. A computer program per se is abstract instructions. Therefore, a computer program is not a physical thing (product) nor a process as they are not "acts" being performed. As such, these claims are not directed to one of the statutory categories of invention (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (signals or carrier waves).

Withdrawal of allowability of claims, rejection on new art

4. The indicated allowability of claims 3, 4, 6 and 8 are withdrawn in view of the newly discovered reference(s) to Dunstan (U.S. Patent No. 5,714,870). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du et al. (U.S. Patent Application Publication No. 20030088326) in view of Dunstan (U.S. Patent No. 5,714,870).

With respect to claims 1, and 11, Du et al. (hereafter Du) teaches; a battery powered device (or method) for playback of a media title from a memory unit (see page 3 paragraph [0031] portable computer as an audio player; is a battery powered device to playback music, stored in a Hard Disk Drive HDD and see page 5 paragraph [0059] power load on the portable computer battery);

the device comprising means for determining available battery energy (see page 3 paragraph [0036] The mini-OS Operating System power saving software manages the usage of the CPU and the MP3 storage devices) and calculation means for calculating energy required for playback of the media title to the end in relation to the available battery energy (see page 3 paragraph [0038] lines 1-16, For example a 500 MHz Pentium III CPU has about 225 MIPS of processing power; and the decode algorithm requiring about 15MIPS, the CPU will be operating less than 10% of the power operating time),

the memory unit comprising a storage medium and reading means for reading at least a part of the media title from the storage medium (see page 3 paragraph [0032] lines 6-12 , RAM memory with approximately 120 Mbytes for use or 2 hours of compressed music),

the reading means being arranged for retrieving playback control information from the storage medium concerning the media title (see page 3 paragraph [0032], lines 14-19, when flash media is used for MP3 storage; and see page 3 paragraph [0036], a small LCD display provide a visual status indicators under control of the mini-OS display management subroutines, all of the contents can be copied to the system RAM, thus minimizing the access of the flash media reader and allowing for a more responsive control over the MP3 files) and the calculation means being arranged for calculating said required energy depending on the playback control information (see page 3 paragraph [0038], lines 9-16 power operating time) and an energy consumption model of the device

(see page 3 paragraph [0038], lines 1-3, Pentium III CPU having about 225 of processing power),

Du does not teach;

wherein the energy consumption model incorporates at least an average energy consumption of the memory unit and display unit per unit of time or file size.

But Dunstan teaches in a method for measuring suspend-time power consumption in a battery-powered electronic device that, predictive data is data that is calculated based on the battery's present state and characteristics, such as the battery's remaining life at present rate drain. Where the battery is equipped with an internal clock, such predictive data may be presented as a rolling average over a fixed time interval (see Dunstan; col. 2, lines 13-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a software for measuring suspend-time power consumption in a battery-powered electronic device as taught by Dunstan, because the software for measuring suspend-time power consumption in a battery-powered electronic device of Dunstan allows to present state and characteristics, such as the battery's remaining life at present rate drain; and predictive data may be presented as a rolling average over a fixed time interval, as desired.

With respect to claim 2, Du in combination with Dunstan teaches all the features of the claimed invention, and Du further teaches that, warning means for

providing a warning signal when not enough battery energy is available for playback of a media title to the end (see page 5 paragraph [0063], lines 1-14, The typical operating system supports six system power states, referred to as S0 (fully on and operational) through S5 (power off). Each state is characterized by power consumption; in other words, how much power is able before to reach the power off).

With respect to claim 3, Du in combination with Dunstan teaches all the features of the claimed invention, except that Du does not teach;

comprising interaction means for offering a user options for choosing an action to perform in relation to the required energy and available energy, such as playing back in a lower resolution or playing back a shorter version of the media title.

But Dunstan teaches that, power consumption monitor 4 may be used to provide predictive information to a user relating to how long host 1 may remain suspended without compromising system integrity due to insufficient capacity of battery . To do this, power consumption monitor 4 may invoke the AtRateTimeToEmpty() smart battery function (see Dunstan; col. 7, lines 15-22).

Dunstan also teaches that, power consumption monitor 4 may periodically refresh the display of predicted permissible suspend time suitable time intervals, such as every five minutes. The accuracy of this display may be improved by

power consumption monitor 4 maintaining a rolling average of calculated capacity loss/time in non-volatile store 7 to account for any variations in battery discharge behavior (see Dunstan; col. 7, lines 30-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a AtRateTimeToEmpty() smart battery function as taught by Dunstan, because the

AtRateTimeToEmpty() smart battery function of Dunstan allows to a user how to accuracy the display improving the power consumption maintaining a rolling average of calculated capacity loss/time in non-volatile store device, as desired.

With respect to claim 4, Du in combination with Dunstan teaches all the features of the claimed invention; and Du further teaches that; the playback information for generating a shorter version of the media title is retrieved from the storage medium, auto generated before or during playback, or edited by a user (see page 3 paragraph [0032], lines 14-19, when flash media is used for MP3 storage; and see page 3 paragraph [0036], a small LCD display provide a visual status indicators under control of the mini-OS display management subroutines, all of the contents can be copied to the system RAM, thus minimizing the access of the flash media reader and allowing for a more responsive control over the MP3 files).

With respect to claims 5 and 9, Du in combination with Dunstan teaches all the features of the claimed invention, and Du further teaches that, the reading means is arranged for retrieving the file size (or playing time) of the media title (see page 3 paragraph [0033], lines 13-20, the decoded signal is converted from digital to analog. Then the output signal from code (8) is amplified (10) (also see FIG. (44) to drive the speakers and or headset (see FIG. 3 (46)). and the calculation means is arranged for calculating the required energy depending on the file size (or playing time) of the media title (see page 3 paragraph [0038], lines 10-16, calculation of power operating time for 30 songs).

With respect to claims 6 and 8, Du in combination with Dunstan teaches all the features of the claimed invention, except that Du does not teach;

comprising a buffer for holding the part of the media title, and a playback unit for consuming the part of the media title from the buffer, wherein the calculation means is arranged for calculating the required energy depending on the number of times the reading means have to fill the buffer for playback of the media title to the end.

But Dunstan teaches that, power consumption monitor 4 may be used to provide predictive information to a user relating to how long host 1 may remain suspended without compromising system integrity due to insufficient capacity of

battery . To do this, power consumption monitor 4 may invoke the
AtRateTimeToEmpty() smart battery function (see Dunstan; col. 7, lines 15-22).

Dunstan also teaches that, for example, a user may be presented with a display detailing how long the device may remain in a suspended condition before the capacity of the battery drops below a predetermined capacity level; such as a level associated with a discharge condition of the battery, or a capacity level associated with a minimum amount of energy required to perform a basic system operations (see Dunstan; col. 8, lines 1-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Du to include a AtRateTimeToEmpty() smart battery function as taught by Dunstan, because the

AtRateTimeToEmpty() smart battery function of Dunstan allows to display detailing to a user detailing how long the device may remain in a suspended condition before the capacity of the battery drops below a predetermined capacity level, to protect the system from an unexpected power loss due to a dead battery, as desired.

With respect to claim 10, Du in combination with Dunstan teaches all the features of the claimed invention, and Du further teaches that, the playback control information comprises characteristic point information and the calculation means is arranged for calculating the required energy depending on the

characteristic point information (see page 5 paragraph [0063], The typical operation system supports six system power states; each state is characterized by power consumption i.e., how much power the computer uses and software resumption, i.e., from what point the operating system restarts).

With respect to claim 12, Du in combination with Dunstan teaches all the features of the claimed invention, and Du teaches a computer program product, which program is operative to cause a processor to perform the method as claimed in claim 11 (see page 2 paragraph [0026] a computer system includes a mini-OS (operation System) software and hardware).

Response to Arguments

6. Applicant's arguments with respect to the claims have been fully considered but they are moot in view of the new ground(s) of rejection set forth hereinbefore.

Regarding section headings, applicant is required to add section headings (see above); the Specification without section headings has no clear distinction between the background and the disclosure of the invention.

Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nonaka [U.S. Patent No. 6,507,195] describes a battery-driven apparatus, for checking batteries.

Murphy [U.S. Patent No. 6,236,326] describes a battery pack capable of powering an electronic unit.

Higuchi et al. [U.S. Patent No. 6,522,361] describes information specifying a state of a battery pack.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix Suarez, whose telephone number is (571) 272-2223. The examiner can normally be reached on weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and for After Final communications.

February 8, 2008

F.S.

/Eliseo Ramos-Feliciano/
Supervisory Patent Examiner, Art Unit 2857